

ABSTRACT OF THE DISCLOSURE

A wireless communications system has a first station that transmits a ciphering reconfiguration activation command to a second station. The ciphering reconfiguration activation command is used to change a ciphering key, and is acknowledged back by the second station. The ciphering key is used to encipher layer 2 protocol data units (PDUs), which are transmitted and received by the two stations. The two stations establish communications through at least one channel. The first station uses a signaling channel to transmit the ciphering reconfiguration activation command. The first station first performs a suspend function upon the signaling channel. The suspend function ensures that the first station does not transmit PDUs to the second station along the signaling channel after a predetermined event. The first station transmits the ciphering reconfiguration activation command along the signaling channel prior to the predetermined event. The second station receives the ciphering reconfiguration activation command and sends an acknowledgment back to the first station. The first station receives the acknowledgment and cancels the suspend function so as to enable the first station to transmit PDUs to the second station along the signaling channel after the predetermined event. The first station and the second station use an old ciphering key prior to the predetermined event, use a new ciphering key after the predetermined event. The ciphering reconfiguration activation command informs the second station of the ciphering key change to the new ciphering key.

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